```
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
         1:
2:
3:
3:
5:
5:
5:
5:
5:
7:
7:
110:
111:
113:
114:
115:
116:
117:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1504479 seqs, 1118970152 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-494-297-1
2274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   August 19, 2003, 12:03:50; Search time 576 Seconds (without alignments) 8835.202 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                              Published_Applications_NA: *
//cgn2_6/ptodata/2/pubpna/USO9A_PUBCOMB.seq:*
//cqn2_6/ptodata/2/pubpna/USO9B_PUBCOMB.seq:*
//cqn2_6/ptodata/2/pubpna/USO9C_PUBCOMB.seq:*
//cqn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
//cqn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*
//cqn2_6/ptodata/2/pubpna/USIOB_PUBCOMB.seq:*
//cqn2_6/ptodata/2/pubpna/USIOB_PUBCOMB.seq:*
//cqn2_6/ptodata/2/pubpna/USIO_NEW_PUB.seq:*
//cqn2_6/ptodata/2/pubpna/USIO_NEW_PUB.seq:*
//cqn2_6/ptodata/2/pubpna/USIO_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atgaaaaaaaaaaggtttcc.....ggataagaaaacatgactag 2274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                      /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
                                                                                                                                                                                                                    /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                      /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                   'cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3008958
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

16	c 15	c 14	13	c 12	c 11	c 10	o 9	8 C	c 7	ი 6	ი 5	c 4	c 3	2	1	Result
50	50	50	50	50.2	50.6	50.6	50.6	50.6	50.6	51.2	52	52	52.4	53	53	Score
2.2 640681	2.2 6381	2.2 6381	2.2 2000		2.2 7819		N		2					2 3 335913	2.3 335913	Query Match Length
. 10	12	. 12	10	12	12		14	12		14	14	12	12	11	11.	DB
US-09-790-988-1	US-10-240-485-71	US-10-311-455-939	US-09-938-842A-2735	US-10-311-455-766	US-10-240-485-160	US-10-311-455-1926	US-10-239-676-50	US-10-240-453-50	US-10-311-455-644	US-10-094-240-10	US-10-239-676-30	US-10-240-453-40	US-10-311-455-1445	US-09-754-853A-3	US-09-754-853A-2	ID
Sequence 1, Appli	Sequence 71, Appl	Sequence 939, App	Sequence 2735, Ap	Sequence 766, App	160,	19	Sequence 50, Appl	50	Sequence 644, App	Sequence 10, Appl	30,	Sequence 40, Appl	Sequence 1445, Ap	Sequence 3, Appli	Sequence 2, Appli	Description

o	ဂ	O		ဂ	C	ဂ	C	Ω	O	C	O	ဂ	O	O	O	ဂ	O	O		O	a	Ω	O	ი	O	c	a
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18
46.6	46.6	46.6	46.6	46.6	46.8	46.8	46.8	46.8	46.8	46.8	47	47	47	47	47	47	47	47.2	47.4	47.8	47.8	48	48.2	48.2	48.2	49	49
2.0	2.0		2.0			2.1	2.1			$^{2.1}$		2.1		2.1	2.1	2.1	2.1	2.1	2.1							2.2	
2140405	15674	15674	10640	7928	335913	335913	18154	15548	13584	9504	16811	12025	11260	_		5347	625	414	5897	6712	6306	9728	11944	6277	5539	16724	16724
13	12	12	12	12	11	11	12	12	12	12	12	12	14	12	12	12	13	10			12	12	12	12	12	12	12
US-10-027-632-76212	US-10-240-485-30	US-10-311-455-336	US-10-304-095-5	US-10-311-455-67	US-09-754-853A-3	US-09-754-853A-2	US-10-311-455-227	US-10-311-455-2128	US-10-311-455-588	US-10-240-453-281	US-10-311-455-1919	US-10-311-455-1271	US-10-239-676-19	US-10-240-453-27	US-10-311-455-2143	US-10-311-455-1642	US-10-027-632-250075	US-09-960-352-6528	US-08-781-986A-320	US-10-311-455-664	US-10-204-708-50	US-10-311-455-1876	US-10-311-455-2160	US-10-311-455-2013	US-10-240-485-180	US-10-240-485-89	US-10-311-455-1063
Sequence 76212, A	Sequence 30, Appl	Sequence 336, App		Sequence 67, Appl	Sequence 3, Appli	Sequence 2, Appli	Sequence 227, App	21	588,	281, 7	Sequence 1919, Ap	127		27,			Sequence 250075,	Sequence 6528, Ap	Sequence 320, App	Sequence 664, App	Sequence 50, Appl	1876,		2013,	Sequence 180, App		Sequence 1063, Ap

ALIGNMENTS

```
Вb
                                     QY
                                                                                   DЪ
                                                                                                                        Ω
                                                                                                                                                                                                                                                      US-09-754-853A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-09-754-853A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERRAL INFORMATION:
APPLICANT: Hauge, Brian M.
APPLICANT: Parnell, Laurence D.
APPLICANT: Parsons, Jeremy D.
                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/09754853A Publication No. US20030005491A1
                                                                                                                                                                  Matches 185;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wang, Ming Li
TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
TITLE OF INVENTION: Soybean Cyst Nematode Resistance
FILE REFERENCE: 38-10(15810)B
CURRENT APPLICATION NUMBER: US/09/754,853A
CURRENT FILING DATE: 2001-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: US 60/174,880
PRIOR FILING DATE: 2000-01-07
NUMBER OF SEQ ID NOS: 1119
                                                                                                                                                                                                                                                                 NAME/KEY: CDS. (45314),(45450)..(45509),(46941)..(48763),(48975)..(49573)
COTHER INFORMATION: Clone ID: 240017_region_G3
                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH: 335913
                                                                                                                                                                                      Match 2.3%;
Local Similarity 45.7%;
                                                                                   99367
1772 TTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATTTAACATTGAGAAAAA 1831
                                                                                                       1712 ACAATAAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGATATTA 1771
                                                                                 ACAAAATATTAAAATATATAAAATTATCTCAATTTTAAATATACAAAATATTTTAAATAA
                                                                                                                                                                    Conservative
                                                                                                                                                                  0;
                                                                                                                                                                  Score 53; DB 11; Length 335913; 
Pred. No. 4.9; 
0; Mismatches 220; Indels 0;
                                                                                                                                                                  0;
                                                                                                                                                                  Gaps
                                                                                   99426
                                                                                                                                                                  0;
```

```
QΥ
                                                                                                                                                밁
                                                                                                                                                                        Qy
                                                                                                                                                                                                        В
                                                                                                                                                                                                                                     Q
Ş
                              밁
                                                     δÃ
                                                                                   Д
                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: CDS
; LOCATION: (46798)..(48763),(48975)..(49573)
; OTHER INFORMATION: Clone ID: 240017_region_G3
US-09-754-853A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 2
US-09-754-853A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/09754853A Publication No. US20030005491A1
                                                                                                                                                                                                                                                                                                                               Matches 185;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wang, Ming Li
TITLE OF INVENTION: Nucleic Acid Molecules
TITLE OF INVENTION: Supbean Cyst Nematode
FILE REFERENCE: 38-10(15810)B
CURRENT APPLICATION NUMBER: US/09/754,853A
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: US 60/174,880
PRIOR FILING DATE: 2000-01-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Hauge,
APPLICANT: Parne
APPLICANT: Parso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Glycine
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                              1712 ACAATAAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGATATTA 1771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            335913
CAGAAGGTTATTCTTACCTTGTCAAAGAAACAGATTCTGAAGGCTATAAGGTTAAAGTTA
                             AAAACAAAAAGAAAATACAAGTAAATAAAAATCCTAAAACAAAAAAACTTTAAACATGAA
                                                          AAGATGGTAAAGCAACCATTAATTTAAAACATGGGGAAAGTTTAACACTTCAAGGTTTAC
                                                                                       CGGTGACTGGTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAATTAAAAA 1891
                                                                                                                                                                                                         TTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATTTAACATTGAGAAAAA 1831
                                                                                                                                                                                                                                                                    ACAAAATATTAAAATATATAAAATTATCTCAATTTTAAATATACAAAATATTTTAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAAAAAACTTGTACGACTTTAAAAATGTAAATAAAAATAAAAAA 99771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGAAGGTTATTCTTACCTTGTCAAAGAAACAGATTCTGAAGGCTATAAGGTTAAAGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAACAAAAAAGAAAATACAAGTAAATAAAAATCCTAAAACAAAAAACTTTAAACATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAATGACTTTAAAGTCATAGAAAAAAAAAAAACTTACAACTTCAAAGTGGTAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGATGGTAAAGCAACCATTAATTTAAAACATGGGGAAAGTTTAACACTTCAAGGTTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATAGCCAAGAAGTAGCAAATGCTACAGTTTCAAAAACAGGAATAA 2116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATÇATATAAAAATACATACAAAATATTAAATAAAACTAATAAGAAGTAAAATTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGTGACTGGTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAATTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parnell, Laurence D. Parsons, Jeremy D.
                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Brian M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               max
                                                                                                                                                                                                                                                                                                                                             2.3%;
                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                           Score 53; DB 11;
Pred. No. 4.9;
                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          And Other Molecules Associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Resistance
                                                                                                                                                                                                                                                                                                                               220;
                                                                                                                                                                                                                                                                                                                                                         Length 335913;
                                                                                                                                                                                                                                                                                                                               Indels
                                                          2011
                                                                                                                                                                                                           99486
                              99666
                                                                                       99606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          With
                                                    δÃ
                                                                                      В
                                                                                                                Qy
                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                     рь
δõ
                           В
                                                                                                                                                                         Qy
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                    2760
                                                                                                                                                                                                                                                                                                1724
                                                                                                                                                                                                                                                                                                                             2819
```

CAACCATTAATTTAAAACATGGGGAAAGTTTAACACTTCAAGGTTTACCAGAAGGTTATT

CTTACCTTGTCAAAGAAACAGATTCTGAAGGCTATAAGGTTAAAGTTAATAGCCAAGAAG

2083

2466

TAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAATTAAAAAATAATAAGCAAG 1903

AATTGCTTTCTCAAACTGTTAAAACAGATAAAACAAACCTCGAATTTAAAGATGGTAAAG

1963

ATAAAAAAGAAGTTATACCTGTAACTCATAATTTAACATTGAGAAAAACGGTGACTGGTT 1843

ATATTAAAAAACTAAAATATAAACATTAATAACTATTTT----AATAATTTCTCTTTAA

AATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGATATTATTCGTATGGAAG 1783 TTAAT - ATAATATATATATTATTATTAATTTATATTAATATATAAATAATACATATA ATAGTAATCCTCCACAGCTAACTGACCTTGATTTCTTTATTCCGAATAACAATAACAATAATATC

2761

TTGGAGACATGAATGATAGTACTTTAGCAGTTGCTAAAATCCTTGTAGAATACGCTCAAG

2820

```
CURRENT APPLICATION NUMBER: US/10/311,455
CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/EP01/07537
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 2424
SEQ ID NO 1445
LENGTH: 6106
                                                                                                                                                               US-10-311-455-1445
                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1445, Application US/10311455 Publication No. US20030143606A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Diagnosis of Diseases TITLE OF INVENTION: cytosine methylation FILE REFERENCE: 5013.1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: OLEK, Alexander APPLICANT: PIEPENBROCK, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                            LENGTH: 61
                                                                                                                                                                                  OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                      ORGANISM: Artificial
                                                                             Local Similarity hes 271; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99667
                                      1544 TATATTATTTCACTGATAGTGCTGAATTAGATAAGGATAAACTAAAAGACTATCATGGTT
AAGAAAAAACTTGTACGACTTTAAAAATGTAAATAAAATAAAAA 99771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAATGACTTTAAAGTCATAGAAAAAAAAAAACTTACAACTTCAAAGTGGTAAGTTCA 99726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BERLIN, Kurt
                                                                             Conservative
                                                                                                                                                                                                                         Sequence
                                                                                                2.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Christian
                                                                               0;
                                                                                                Score 52.4;
Pred. No. 1
                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Associated with the Immune
                                                                                                                    DB 12;
                                                                                                                    Length 6106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              _
                                                                               8;
                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        System
2880
                                                                             ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Det
```

```
US-10-239-676-30/c
Sequence 30, Application US/10239676
Publication No. US20030082609A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                          밁
                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/EP01/03973
PRIOR APPLICATION UMBER: DE 10019058.8
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: DE 10019173.8
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 350
                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-240-453-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-240-453-40/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            믕
                                                                               RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 40
LENGTH: 7195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40, Ap
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA TITLE OF INVENTION: Transcription TITLE OF INVENTION: by Means of Assessing the Methylation StiTITLE OF INVENTION: With DNA TRanscription FILE REFERENCE: 5013.1009

CURRENT APPLICATION NUMBER: US/10/240,453

CURRENT FILING DATE: 2002-10-02
    APPLICANT: OLEK, Alexander
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: PIEPENBROCK, Christian APPLICANT: BERLIN, Kurt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: OLEK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: chemically treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                        1126
                                                                                                                                                                                                                                                                                      1837
                                                                                                                                                                                                                                                                                                                                                                                                           1717 AAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGATATTATTCGT 1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2465
                                                                                                                                                                                                                                                                                                                                    ATGGAAGATAAAAAAGGAAGTTATACCTGTAACTCATAATTTAACATTGAGAAAAACGGTG 1836
                                                                                                                                                                                                                                                                                                                                                                                АРАСАТТАРАТТАТТТТАРАВАТАТСТСАРАТАТТСАРАССАТАРАРАСТАТТАРАТСТА 1187
                                                                                                                            CCTAAAAAATCCTTAATTTAAAATA 983
                                                                                                                                                        GGTAAAGCAACCATTAATTTAAAACA 1982
                                                                                                                                                                                                                       ACTGGTTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAATTAAAAAATAAT 1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ТАААААТТАААААТТТТААААССАТСТАТАТААААТАА 2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAATAATATAATTTAACTAAACCTTTCCAAAATATATTTTAAAAACACTTTCTTAA - - AT
                                                                                                                                                                                                                                                    TAGCAAATGCTACAGTTTCAAAAACAGGAATAACAAGTGA 2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10240453
No. US20030148326A1
                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alexander
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 52;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genomic DNA (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                            125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methylation Status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 7195;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of Genes Associated
                                                                                                                                                                                          1009
                                                                                                                                                                                                                                                      1067
                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                US-10-094-240-10
                                                                                                                                                                                                                                                                                                                                 RESULT 6
US-10-094-240-10/c
                                                                                                                                                                                                                                                                                  Sequence 10, Application US/10094240 Publication No. US20030082637A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 30
LENGTH: 7195
Query Match
                                                                                              SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2001-04-06
2000-04-06
2000-04-07
                                                            LENGTH: 49
                                                                                                              SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 71
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DE 10019058.8
DE 10019173.8
DE 10032529.7
DE 10043826.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1837
                                                                               4985
                                                                                                            PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                               gambiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.3%;
   2.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
   Score
   51.2;
```

```
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-239-676-30
CURRENT APPLICATION NUMBER: US/10/094,240 CURRENT FILING DATE: 2001-03-08 PRIOR APPLICATION NUMBER: 10/056,405 PRIOR FILING DATE: 2002-01-24 PRIOR APPLICATION NUMBER: 60/264,649 PRIOR FILING DATE: 2001-01-26 NUMBER OF SEQ ID NOS: 27
                                                                                                                                                                           APPLICANT: ZWIEBEL, LAURENCE J.
TITLE OF INVENTION: ARRESTIN GENE, POLYPEPTIDE,
FILE REFERENCE: N8289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 2002-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with Gene Regulation
FILE REFERENCE: 5013.1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/EP01/03968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1777 ATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATTTAACATTGAGAAAAACGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                         1008 CCTAAAAAAATCCTTAATTTAAAATA 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1246 AAACATTAAAATTTATTTTAAAATATCTCAAATAATTCAAACATAAAAACTATTAATCTA 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1717 AAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGATATTATTCGT 1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTAAAGCAACCATTAATTTAAAACA 1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAATAATATAATTTAACTAAACCTTTCCAAAATATATTTTAAAAACACTTTCTTAA--AT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTGGTTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAAATTAAAAAATAAT 1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 52; DB
Pred. No. 1.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 14; Length 7195;
                                                                                                                                                                                                           AND METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲
```

В 14;

Length 4985;

0

```
CURRENT APPLICATION NUMBER: US/10/311,455
CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/EP01/07537
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 2424
SEQ ID NO 644
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-10-311-455-644/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                    Sequence 644, Application US/10311455 Publication No. US20030143606A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 43.9%; Matches 266; Conservative
                                                                                                                                                                                                                                                                                  APPLICANT: OLEK, Alexander APPLICANT: PIEPENBROCK, C APPLICANT: BERLIN, Kurt
                                                                                                                                                                                                                                   TITLE OF INVENTION: Diagnosis of Diseases Associated with the TITLE OF INVENTION: cytosine methylation FILE REFERENCE: 5013.1014
ORGANISM: Artificial FEATURE:
                                 TYPE: DNA
                                               ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1384 GACCTCTTTAAATATACTGTGAAACCAAGAGATACCGATCCTGACACTTTCTTAAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1324 AAAACAATGACTCCAGACTTTACAACAGGAGAAGTAAAATACACTCATATTGCAGGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2326 ACTAAA 2321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATTTCCATTTTGAAATTGAATTAAAAAATAATAAGCAAGAATTGCTTTCTCAAACTGTT 1923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTAACTCATAATTTAACATTGAGAAAAACGGTGACTGGTTTAGCTGGTGACAGAACTAAA 1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGCATCCAGAAGATTTAGTTGATATTATTCGTATGGAAGATAAAAAAAGAAGTTATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTGACCTTGATTTCTTTATTCCGAATAACAATAATATCAATCTCTTATTGGAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTTTAGCAGTTGCTAAAATCCTTGTAGAATACGCTCAAGATAGTAATCCTCCACAGCTA 1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTAATTAATTAATAAATAAATAATAATA -- ATAATTATTATTGTTATAATAATAATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAACTGAGACACAATTGCGTGCGGCTACTCAGTTAGCAATATTATTTTCACTGATAGT 1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAAAAAAGTAATTGAGAAGGGTTACAGGGAAAAAGGACAAGCTATTGAGTATAGTGGT 1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PIEPENBROCK, Christian
               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 1.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2
                                                                                                                                                                                                                                                                  Immune System
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2805
                                                                                                                                                                                                                                                                bу
                                                                                                                                                                                                                                                                  Deteri
                        Ş
                                                             밁
                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: chemically treated genomic DNA US-10-311-455-644
                                                                                                                                                                                                 US-10-240-453-50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-240-453-50/c
                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 350
SEQ ID NO 50
LENGTH: 6815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 50, Application US/10240453 Publication No. US20030148326A1
                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity Matches 137; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with TITLE OF INVENTION: Transcription
TITLE OF INVENTION: Waens of Assessing the Methylation
TITLE OF INVENTION: With DNA TRANSCRIPTION
FILE REFERENCE: 5013.1009
                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/240,453
CURRENT FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: PCT/EP01/03973
PRIOR FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR FILING DATE: 2000-04-06
                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: DE 10019173.8 PRIOR FILING DATE: 2000-04-07
                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                               OTHER INFORMATION: chemically treated genomic DNA
                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1871 ATTTTGAAATTGAATTAAAAAATAATAAGCAAGAATTGCTTTCTCAAACTGTTAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1991 GTTTAACACTTCAAGGTTTACCAGAAGGTTATTCTTACCTTGTCAAAGAAACAGATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1931 ATAAAACAAACCTCGAATTTAAAGATGGTAAAGCAACCATTAAATTTAAAACATGGGGAAA
                               ATAAAACAAACCTCGAATTTAAAAGATGGTAAAGCAACCATTAATTTAAAAACATGGGGAAA 1990
                                                                                ATTTTGAAATTGAAATTAAAAAAATAATAAGCAAGAATTGCTTTCTCAAAACTGTTTAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACGAAAAATTAAAAAAAACACCATATTTAAAAATAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATAACAAGTGATGAGACACTTGCTTTTGAAAATAATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTTAAAATAAAATCCGAAAAAAAAAAAAAATAATCCTTAAAAAACCGTTAAAACAA
                                                              AATTTAAAATAAAATCCGAAAAAAAAAAAAACAAAATAATCCTTAAAAAACCGTTAAAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGCTATAAGGTTAAAGTTAATAGCCAAGAAGTAGCAAATGCTACAGTTTCAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                               2.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.2%;
                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                               Score 50.6;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 50.6;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                .
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6;
                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
                                                                                                                               144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144;
                                                                                                                                                              12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                 (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Homo sapiens)
                                                                                                                                 Indels
                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNZ
                                                                                                                                                                6815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Status of Genes Associa
                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
5616
                                                              5676
                                                                                                1930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5676
```

0;

Det

```
RESULT 10
US-10-311-455-1926/c
; Sequence 1926, Application US/10311455
                                                                        밁
                                                                                         γQ
                                                                                                                       밁
                                                                                                                                                δÃ
                                                                                                                                                                                 밁
                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                    ; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-239-676-50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-239-676-50/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/239,676
CURRENT FILING DATE: 2002-09-24
PRIOR APPLICATION NUMBER: PCT/EP01/03968
DE 10019058.8
DE 10019173.8
DE 10043826.1
PRIOR FILING DATE: 2001-04-06
                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 50, Application US/10239676 Publication No. US20030082609A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000-04-06
2000-04-07
2000-06-30
2000-09-01
NUMBER OF SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated
FILE REFERENCE: 5013.1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 6815
                                                                                                                                                                                                                                                                                                                                                    Local Similarity 48.8 nes 137; Conservative
                                                                                                                                                                                                                                                                                            5735 AATTTAAAATAAAATCCGAAAAAAAAAAAACAAAATAATCCTTAAAAAAACCGTTAAAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5495
                                                                                                                                                                                                                                                                                                                      1871 ATTTTGAAATTGAATTAAAAAATAATAAGCAAGAATTGCTTTCTCAAACTGTTAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1991
                                                                                                GAATAACAAGTGATGAGACACTTGCTTTTGAAAATAATAAA 2151
                                                                                                                                                                                                    GTTTAACACTTCAAGGTTTACCAGAAGGTTATTCTTACCTTGTCAAAGAAACAGATTCTG
                                                                                                                                                                                                                                                                  ATAAAACAAACCTCGAATTTAAAGATGGTAAAGCAACCATTAATTTAAAAACATGGGGAAA 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAATAACAAGTGATGAGACACTTGCTTTTGAAAATAATAAA 2151
                                                                                                                                                                                                                                        CACGAAAAAATTAAAAAAAAAACACCATATTTAAAAATAATAA 5455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGCTATAAGGTTAAAGTTAATAGCCAAGAAGTAGCAAATGCTACAGTTTCAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTTAACACTTCAAGGTTTACCAGAAGGTTATTCTTACCTTGTCAAAGAAACAGATTCTG
                                                                      CACGAAAAATTAAAAAAAACACCATATTTAAAAATAATAA 5455
                                                                                                                             AAGGCTATAAAGTTAAATAGCCAAGAAGTAGCAAATGCTACAGTTTCAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.2%;
                                                                                                                                                                                                                                                                                                                                                              Score 50.6; DB 14; Pred. No. 2.6;
                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 144;
                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                             Length 6815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene
                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Regulation
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                       2110
                                                                                                                                                                                   5556
                                                                                                                                                                                                                                        5616
                                                                                                                                                                                                                                                                                             5676
                                                                                                                                                                                                                                                                                                                       1930
                                                                                                                                                                                                             2050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2050
                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                       US-10-240-485-160/c
                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                        ДЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1926
LENGTH: 7819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Publication No. US20030143606A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                         1938
                                                                                                                                                                                                                                                                                                                                                                             1878
                                                                                                                                                                                                                                                                                                                                                                                                                                    1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1758
                                                                                                                                                                                                                                                                                               546
                                                                                                                                                                                                                                                                                                                                                                                                                                                               726
```

```
APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune Syst
TITLE OF INVENTION: Diagnosis methylation
FILE REFERENCE: 5013.1014
CURRENT APPLICATION NUMBER: US/10/311.455
CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PTION PRIOR FILING DATE: 2001-07-02
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10043826.1
APPLICANT: OLEK, Alexander
APPLICANT: BEBLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated wit
TITLE OF INVENTION: Diagnosis of Diseases Associated wit
TITLE OF INVENTION: Metastasis
FILE REFERENCE: 5013.1007
CURRENT APPLICATION NUMBER: US/10/240,485
CURRENT APPLICATION NUMBER: DCT/EP01/03970
PRIOR APPLICATION NUMBER: DCT/EP01/03970
PRIOR FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR APPLICATION NUMBER: DCT/EP01/03970
PRIOR APPLICATION NUMBER: DC 10019058.8
PRIOR APPLICATION NUMBER: DC 10019058.8
PRIOR APPLICATION NUMBER: DC 10019058.7
PRIOR APPLICATION NUMBER: DC 10019058.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-311-455-1926
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 160, Application US/10240485 Publication No. US20030148327A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 155; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 2424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1638 TAAAATCCTTGTAGAATACGCTCAAGATAGTAATCCTCCACAGCTAACTGACCTTGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   786 TATTACTAATTTTAAAATTCCTTTTTACCTAATCTTTCAAACCAAATTTTAACCATATCT 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        846 TAACATCCCAAAATATTAAAATTACAAATATAAACCACTACGCCTAACTCACCCATACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAAAAAAAAATTCTAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAACCTCGAATTTAAAGATGGTAAAGCAA 1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATTGAATTAAAAAATAATAAGCAAGAATTGCTTTCTCAAACTGTTAAAACAGATAAAAC 1937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACATTGAGAAAAACGGTGACTGGTTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGA 1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTAGTTGATATTATTCGTATGGAAGATAAAAAAAGAAGTTATACCTGTAACTCATAATTT 1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTTATTCCGAATAACAATAAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGA 1757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACATTCAAAACACTCAATAATCTAATACCACTCAAAACCTATAAACCAAACAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 50.6; DE Pred. No. 2.8; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 7819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 System by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
RESULT 12
US-10-311-455-766/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                 US-10-311-455-766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-240-485-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 7819
TYPE: DNA
                                                                                                                                                           NUMBER OF SEQ ID NOS: SEQ ID NO 766
                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 766, Application US/10311455 Publication No. US20030143606A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 2.2%;
Best Local Similarity 47.1%;
Matches 155; Conservative
      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/311,455
CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/EP01/07537
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                              APPLICANT: PIEPENBROCK, Christian APPLICANT: BERLIN, Kurt TITLE OF INVENTION: Diagnosis of Diseases TITLE OF INVENTION: cytosine methylation FILE REFERENCE: 5013.1014
                                                                                                                                                                                        PRIOR APPLICATION NUMBER: DE 10043826.1 PRIOR FILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: OLEK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: DE 10032529.7 PRIOR FILING DATE: 2000-06-30 PRIOR APPLICATION NUMBER: DE 10043826.1 PRIOR FILING DATE: 2000-09-01 NUMBER OF SEQ ID NOS: 202
                                                                                              TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
                                                                            OTHER INFORMATION: chemically treated genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                           ENGTH: 19087
                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1638 TAAAATCCTTGTAGAATACGCTCAAGATAGTAATCCTCCACAGCTAACTGAACTTGATTT
    157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     546
                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTATTCCGAATAACAATAACAATCTCTTATTGGAACTCAGTGGCATCCAGAAGA 1757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAAAAAAAAATTCTAAAAAAAAA 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAACCTCGAATTTAAAGATGGTAAAGCAA 1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTGAATTAAAAATAATAAGCAAGAATTGCTTTCTCAAACTGTTAAAAACAGATAAAAC 1937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTAGTTGATATTATTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATTT 1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTACTAATTTTAAAATTCCTTTTTACCTAATCTTTCAAACCAAATTTTAACCATATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAACATCCCAAAATATTAAAATTACAAATATAAACCACTACGCCTAACTCACCCATACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACATTGAGAAAAACGGTGACTGGTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGA 1877
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                             Alexander
                 2.2%;
Score 50.2; D
Pred. No. 5.1;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 50.6; DB 12;
Pred. No. 2.8;
0; Mismatches 174;
   0;
                                                                                                                                                                                                                                                                                                                                             Associated with the Immune System by Deter
                                DB 12;
   178;
                                                                              (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                Length 19087;
   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             787
   0
                                         QУ
                                                                           뫄
                                                                                                      δÃ
                                                                                                                                         밁
                                                                                                                                                                   Qy
                                                                                                                                                                                                      DЬ
                 밁
                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-09-938-842A-2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뫄
                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Arabidopsis thaliana US-09-938-842A-2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2735, Application Patent No. US20020160378A1
                                                                                                                                                                                                                                                                              Query Match
Best Local 9
                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Harper, Jeff APPLICANT: Kreps, Joel
                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                Local Similarity nes 116; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1757
                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                2.2%;
                                                                                                                                                                                                                                                                   0;
```

```
CURRENT APPLICATION NUMBER: US/09/938,842A
CURRENT FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR FILING DATE: 2000-08-24
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-01-16
PRIOR PILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/300,111
PRIOR APPLICATION NUMBER: US 60/300,111
PRIOR APPLICATION NUMBER: US 60/300,111
PRIOR FILING DATE: 2001-06-22
NUMBER OF SEQ ID NOS: 5379
SEQ ID NO 2735
SEQ ID NO 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, Xun
APPLICANT: Zhu, Tong
TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
                                                                                                                                                                                                                                                                                                                         1241 TTATTTGAATCTTTAGAATGATATACATCGAATATCTATGGAAATAAAAGTCAGTG
                                                                                                                                                                                                                                                                                                                                                             1692 TGATTTCTTTATTCCGAATAACAATAACAATATCAATCTCTTATTGGAACTCAGTGGCATCC
                                                                                                                                                                                                                 TTTTGAAATTGAATTAAAAAATAATAAGCAAGAATTGCTTTCTCAA 1917
                                                                                                                                                         TAATTTAACATTGAGAAAAACGGTGACTGGTTTAGCTGGTGACAGAACTAAAGATTTCCA 1871
                                                                                                                                                                                                                                                AGAAGATTTAGTTGATATTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTTAGTTGATATTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATT
TTATTAAATACCAAAGAAAAAGTGAAAAAATTATAAAATTATAAA 1466
                                                                                                          TTAATAATAAGAGGAAAAAAGGTGAAAAACATTAAAGTGCCCATAGAAAAGTTGAAAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAGGTTAAAGTTAATAGCCAAGAAGTAGCAAAT 2091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACTTCAAGGTTTACCAGAAGGTTATTCTTACCTTGTCAAAGAAACAGATTCTGAAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAACCTCGAATTTAAAGATGGTAAAGCAACCATTAATTTAAAACATGGGGAAAGTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAATTAAAAAAATAAAAACTCTAACATTACTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCTATTAAAAACAACAATAAAATCACTTTCCCCTTCTCAAATTAACAAATATTAAATCAA 10302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AMATTGAATTAAAAAATAATAAGCAAGAATTGCTTTCTCAAACTGTTAAAAACAGATAAAA 1936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAACATTGAGAAAAACGGTGACTGGTTTAGCTGGTGACAGAACTAAAGATTTCCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/09938842A
                                                                                                                                                                                                                                                                                                                                                                                                                                Score 50; DB 1 Pred. No. 2; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                     110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . 1996
                                                                                                          1420
                                                                                                                                                                                                                    1360
                                                                                                                                                                                                                                                                         1811
                                                                                                                                                                                                                                                                                                                           1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10362
                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
Sequence 939, Application US/10311455
Publication NO. US/20030143606A1
GENERAL INFORMATION:
APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases As:
TITLE OF INVENTION: Cytosine methylation
FILE REFERENCE: 5013.1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/EP01/07537
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 2424
SEQ ID NO 939
LENCTH: 6381
                                                                                                                                                                                                                                                                                                        RESULT 15
US-10-240-485-71/c
US-10-240-485-71/c
; Sequence 71, Application US/10240485
; Publication No. US20030148327A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-311-455-939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-311-455-939/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 2.3
Best Local Similarity 48.3
Matches 140; Conservative
TITLE OF INVENTION: Diagnosis of Diseases Associated with TITLE OF INVENTION: Metastasis FILE REPERENCE: 5013.1007 CURRENT APPLICATION NUMBER: US/10/240,485 CURRENT FILING DATE: 2002-10-02 PRIOR APPLICATION NUMBER: PCT/EP01/03970 PRIOR FILING DATE: 2001-04-06
PRIOR PRIOR PRIOR DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR APPLICATION NUMBER: DE 10019173.8
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-07
                                                                                                                                                                                                                                             APPLICANT: PIEPENBROCK, Christian APPLICANT: BERLIN, Kurt
                                                                                                                                                                                                                                                                                          APPLICANT: OLEK, Alexander
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/311,455
CURRENT FILING DATE: 2002-12-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1708 AATAACAATAAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGAT 1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAAAATATATAAAAAAAAAATTAAAATTAAAACATTCTAAAATTCTAAC 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTAAAGATGGTAAAGCAACCATTAATTTAAAACATGGGGAAAGTTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTAACAAAAACAAATAAACAAAAAATTTATCCCCCAAAATACCTAAATAAACATTTACA 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAACGGTGACTGGTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAATTA 1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTATTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATTTAACATTGAGA 1827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches 150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 50; DB Pred. No. 3.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Associated with the Immune System by Deterr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 6381;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1035
```

```
Вþ
                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                       Qγ
                                   2
                                                                            В
                                                                                                             S
V
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-240-485-71
                                                                                                                                                                                                                                                                                                                                                                                             Query Match 2.2%;
Best Local Similarity 48.3%;
Matches 140; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR FILING DATE: '2000-09-01
NUMBER OF SEQ ID NOS: 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: DE 10032529.7 PRIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 6381
                                                                                                                                                     1768 ATTATTCGTATGGAAGATAAAAAAGAAGTTATACCTGTAACTCATAATTTAACATTGAGA 1827
                                                                                                                                                                                                                                                                                                                     1154 ATTAACAAAAACAAATAAACAAAAAATTTATCCCCCAAAATACCTAAATAAACATTTACA 1095
                                                                                                                                                                                                                                                                                                                                                        1708 AATAACAATAAATATCAATCTCTTATTGGAACTCAGTGGCATCCAGAAGATTTAGTTGAT 1767
914 ATAAAAATATATAAAAAAAAATTAAAATTAAAACATTCTAAAATTCTAAC
                                     TTTAAAGATGGTAAAGCAACCATTAATTTAAAACATGGGGAAAGTTTAAC
                                                                          ATATTAATCATTATAATATTTTAAAAAAATTTTAAAAAATTCAAAACTAAAATACTAA
                                                                                               AAAACGGTGACTGGTTTAGCTGGTGACAGAACTAAAGATTTCCATTTTGAAATTGAATTA 1887
                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                Score 50; 1
Pred. No. 3.
                                                                                                                                                                                                                                                                                                                                                                                               Mismatches 150;
                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 12; Length 6381;
                                                                                                                                                                                                                                                                                                                                                                                                 Indels
865
                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

0

Search completed: August 19, Job time : 581 secs 2003, 15:17:45

915

975

1035

